



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,082	03/24/2005	Eberhard Kertscher	186381/US (468390-28)	1874
75149 7590 09/17/2008 Dorsey & Whitney LLP US Bank Center 1420 Fifth Avenue Suite 3400 Seattle, WA 98101-4010				
EXAMINER				
MUSSER, BARBARA J				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
09/17/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/529,082

**Applicant(s)**

KERTSCHER ET AL.

**Examiner**

BARBARA J. MUSSER

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-18 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10, 13 and 19-23 is/are rejected.
- 7) ☒ Claim(s) 7, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen(WO 99/62691), Lambert et al.(U.S. Patent 6,280,554), Mehoudar(U.S. Patent 5,324,371) and Bergland et al.(U.S. Patent 5,016,182).

Cohen discloses an apparatus for making drip irrigation tubes comprising an extruder(2a), a calibrating device(4a), a cooling device, a feed apparatus for feeding drippers into the tube along a guideway(10), and means for connecting the drippers to the tube wall(20). The connecting means comprises the guideway, which extends into the calibration area, and a pressing roller(20) which presses the dripper against the tube wall inside the calibrator. The calibrating device(4a) has an aperture for narrowing the diameter of the tube which has a conical profile. The calibrating device has a recess(Figure 6) into which a pressing roller(20) protrudes. The reference does not disclose the shape of the pressing roller. Lambert et al. discloses a pressing device having a recess which corresponds to the contour of the tube.(Figure 4) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the roller of Cohen have a recess so that its shape corresponds to the contour of the tube allowing better pressure application.

The references cited above do not disclose marking the locations of the dripper on the tube. Mehoudar discloses that the locations of the dripper have to be sensed so that the apertures are placed in the correct location in the tube but does not disclose exactly how the locations are determined.(Col. 4, ll. 62-65) Bergland et al. discloses printing on a web via a roller and then sensing the printed locations so that the cutting occurs at the desired location.(Col. 4, ll. 52-62) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply ink to the pressing roller of Cohen and Lambert et al. which would mark the location of the drippers since this would allow the dripper locations to be easily determined for later aperture placement and since Bergland et al. discloses using sensors to insure that cutting occurs in the desired locations based on the location of the printing.(Col. 4, ll. 52-62)

Regarding claim 2, while the references do not disclose the recess in the calibrator extending from the end of the guideway to the wall of the calibrator, one in the art would appreciate that its length would depend on the size of the pressing roller and the size of the calibration area. It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the recess in the calibrator from the end of the guideway to the wall of the calibrator so that pressure could be applied for the longest amount of time, insuring a good bond.

Regarding claim 3, Cohen discloses the pressure is adjustable.(Pg. 8)

3. Claims 4, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen, Lambert et al., Mehoudar, and Bergland et al. as applied to claims 1-3 above, and further in view of Giuffre(U.S. Patent 6,896,758).

The references cited above do not disclose using air jets to eject the drippers. Giuffre discloses the drippers can be shot into the tube via compressed air.(Col. 7, ll. 2) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use compressed air to move the drippers into the tube since Giuffre discloses this is a known alternative method of inserting drippers into tubes.(Col. 7, ll. 1-3)

4. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen, Lambert et al., Mehoudar, Bergland et al., and Giuffre as applied to claim 4 above, and further in view of Sato(U.S. Publication 2001/0053116A1) and McConnell(US Patent 2,048,942).

The references cited above do not disclose a pair of rollers opposite each other which eject the dripper onto the guideway. Both Sato[0004] and McConnell(Pg. 2, ll. 23-25) show the use of a pair of rollers to eject an article is well-known in general in the material handling arts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a pair of rollers opposite one another to eject the dripper onto the guideway in Cohen, Lambert et al., Mehoudar, Bergland et al., and Giuffre since Sato and McConnell disclose the use of such ejection rollers is well-known in the material handling arts.

Regarding claim 6, It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a sensor to detect the presence of a dripper on the guideway so that a warning to be issued when the drippers are not fed properly.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 1 above, and further in view of either of Stokes(U.S. Patent 2,597,041) and Tilson(U.S. Patent 2,234,536)

The references cited above do not disclose the pressing roller providing a physical impression on the tube. Both Stokes(Col. 6, ll. 58-61) and Tilson(Col. 1, ll. 37-38) discloses that embossing is a known alternative type of marking to printing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a marking structure on the roller which leaves a physical mark since both Stokes(Col. 6, ll. 58-61) and Tilson(Col. 1, ll. 37-38) discloses this is a known alternative method of marking to printing.

6. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen(WO 99/62691), Mehoudar(U.S. Patent 5,324,371) and Bergland et al.(U.S. Patent 5,016,182).

Cohen discloses an apparatus for making drip irrigation tubes comprising an extruder(2a), a calibrating device(4a), a cooling device, a feed apparatus for feeding drippers into the tube along a guideway(10), and means for connecting the drippers to the tube wall(20). The connecting means comprises the guideway, which extends into the calibration area, and a pressing roller(20) which presses the dripper against the tube wall inside the calibrator. The calibrating device(4a) has an aperture for narrowing the diameter of the tube which has a conical profile. The calibrating device has a recess(Figure 6) into which a pressing roller(20) protrudes.

The reference cited above does not disclose marking the locations of the dripper on the tube. Mehoudar discloses that the locations of the dripper have to be sensed so that the apertures are placed in the correct location in the tube but does not disclose exactly how the locations are determined.(Col. 4, ll. 62-65) Bergland et al. discloses printing on a web via a roller and then sensing the printed locations so that the cutting occurs at the desired location.(Col. 4, ll. 52-62) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply ink to the pressing roller of Cohen which would mark the location of the drippers since this would allow the dripper locations to be easily determined for later aperture placement and since Bergland et al. discloses using sensors to insure that cutting occurs in the desired locations based on the location of the printing.(Col. 4, ll. 52-62)

Regarding claim 20, the track(10) is considered a pressing unit which is configured(has a flat surface) to receive the dripper units.

Regarding claim 21, the track is spaced from the roller as it is on one side of the tube and roller is on the other.

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 19 above, and further in view of either of Stokes(U.S. Patent 2,597,041) and Tilson(U.S. Patent 2,234,536)

The references cited above do not disclose the pressing roller providing a physical impression on the tube. Both Stokes(Col. 6, ll. 58-61) and Tilson(Col. 1, ll. 37-38) discloses that embossing is a known alternative type of marking to printing. It would have been obvious to one of ordinary skill in the art at the time the invention was made

to have a marking structure on the roller which leaves a physical mark since both Stokes(Col. 6, ll. 58-61) and Tilson(Col. 1, ll. 37-38) discloses this is a known alternative method of marking to printing.

### ***Response to Arguments***

8. Applicant's arguments filed 5/12/08 have been fully considered but they are not persuasive.

9. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Regarding applicant's argument that Mehoudar indicates sensors already exist and therefore there would be no reason to look for other methods of performing the task, the fact that one method is known does not mean that other methods might not be obvious or that one in the art would not ever invent again, i.e. the fact that one method is known to perform a task does not mean that no one will ever attempt to perform this task in a different manner, perhaps to decrease costs or increase production.

Regarding applicant's argument that changes in the locations of the drippers would mean that marks at a preset distance would not locate the drippers, applicant's arguments are not commensurate in scope with the claims since the claims only require the marking to be "in the region of the respective dosing unit", i.e. nearby and preset marks would be "in the region of" the drippers.



***Allowable Subject Matter***

10. Claims 7, 11, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. Claims 14-18 are allowed.
12. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 7, 11, and 12, the prior art of record does not teach or fairly suggest using an airstream formed by air jets which come out into the guideway and are disposed such that air hits the drippers at an angle of 25 degrees in an apparatus for forming a drip irrigation tube. Regarding claims 14-18, the prior art of record does not teach or fairly suggest a marking device having a physical pattern on the entire surface of the roll which marks the locations of the dripper units.

***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA J. MUSSER whose telephone number is (571)272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 1791

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BJM

/B. J. M./

Examiner, Art Unit 1791

/Richard Crispino/

Supervisory Patent Examiner, Art Unit 1791